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ABSTRACT

This document reports on a study that analyzes the business management processes of Australia's Framing the Future program (FTF) in terms of the extent to which they demonstrate e-commerce principles. Chapter 1 describes the concept of e-commerce in relation to vocational education and training (VET). It defines e-commerce as any business transaction in which participants prepare or transact business or conduct trade in goods or services electronically. Chapter 2 provides an overview of FTF, a staff development program. Chapter 3 provides a fuller explanation of the origins, rationale, and direction of e-commerce as a background to the analysis of FTF in Chapters 4-6. Chapter 4 on operations of the FTF national office shows the national project management team uses a range of e-commerce strategies to enable it to meet mass market and individual demands and to provide a low cost, high speed, very reliable, and high quality service. Chapter 5 discusses a benchmarking exercise that was undertaken to compare FTF with two leading Australian examples of e-commerce. It identifies areas where FTF could improve and extend its e-commerce strategies and impact. Chapter 6 provides results of interviews with a range of key stakeholders to cross-check other findings about the extent to which FTF uses e-commerce. Chapter 7 lists e-strategies to enhance FTF processes and the value of e-commerce for VET. (Contains 28 references.) (YLB)

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Framing the Future

An e-commerce operation

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Contents

EXECUTIVE SUMMARY 1

- Definition 1
- Brief 2
- Research strategies 2
- Major Findings 3
- Possible future steps 3

CHAPTER 1 - INTRODUCTION TO E-COMMERCE 5

- Reactions to the term e-commerce 5
- What is e-commerce? 6
- Imperatives driving e-commerce 6
- Key e-commerce principles 7

CHAPTER 2 - FRAMING THE FUTURE'S EVOLUTION TOWARDS E-COMMERCE 9

- Background 10
- Evolution of business processes 11
- Insights from 1998 Evaluation 15
- Facilitators' Network 17
- Summary 17

CHAPTER 3 - E-COMMERCE EXPLAINED 19

- Definitions 19
- Information economy 20
- E-commerce 22
- Origins and growth of e-commerce 24
- Electronic commerce activities in Australia 27
- Commonwealth Government stimulus for e-commerce 29
- Context for Framing the Future's e-commerce 31

CHAPTER 4 - ANALYSIS OF FRAMING THE FUTURE'S BUSINESS PROCESSES 33
Hypotheses and questions 33
Framing the Future's website 34
Framing the Future's products and services 36
Framing the Future's customers 38
Framing the Future's internal services 39
Framing the Future's e-business processes 41
Exploiting the virtual value chain 43

CHAPTER 5 - BENCHMARKING AGAINST FAIRFAX ONLINE AND ABC ONLINE 47
Benchmarking process 47
Framing the Future's core competencies 48
Framing the Future's key business processes 48
Framing the Future's critical success factors 48
Selection of Fairfax Online and the ABC 50
Benchmarking questions 51

CHAPTER 6 - FINDINGS FROM STAKEHOLDER INTERVIEWS 53
Questions and responses 53
Additional matters 58
Summary 58

CHAPTER 7 - POSSIBLE FUTURE STEPS 59
E-strategies 60
Influencing VET 60

REFERENCES 61

Executive Summary

Framing the Future is a staff development program funded by the Australian National Training Authority (ANTA), and commenced in 1997. Its primary objective is to provide a structure for people in the Vocational Education and Training (VET) sector nationally to develop the skills and knowledge they need to help implement the National Training Framework (NTF).

Framing the Future is managed by a national project management team based at the Elizabeth Campus of Regency Institute of TAFE in South Australia and is advised by a National Reference Group. The team also benefits from close links to ANTA through a Liaison Officer and from its network of State and Territory contacts.

This study focuses on the business management processes of Framing the Future, identifying the e-commerce components of the national operation. The study was undertaken from July to October 1999 by John Mitchell, from John Mitchell & Associates, Sydney. Assistance was provided by the Framing the Future national project management team, members of the National Reference Group, the ANTA Liaison Officer and State and Territory contacts.

DEFINITION

In the study, Framing the Future's business management processes are analysed in terms of the extent to which they demonstrated e-commerce principles. Electronic commerce or e-commerce is a new term to be used in connection with educational organisations and hence requires definition.

Through the use of digital data and electronic communication, e-commerce opens up new ways of conducting business. E-commerce is defined as any type of business transaction in which the participants prepare or transact business or conduct their trade in goods or services electronically. (*Australia's e-commerce report card*, 1999, p3). E-commerce does not need to replace all face to face contact: it can complement face to face interaction.

BRIEF

In the three years from 1997 to 1999, Framing the Future's national project management team has progressively developed new ways of communicating with not only the hundreds of funded project teams but with a much wider audience of interested practitioners. Framing the Future's main business strategies include the extensive use of a website, telephone, post, numerous publications and personal contact via workshops and visits. Many of these strategies could be called e-commerce strategies, as e-commerce involves the use of digital data and electronic communication to provide products and services.

This study springs from the fact that the Framing the Future operation previously was evaluated as highly efficient and effective (Field, 1997, 1998). The study suggests that Framing the Future's high level of efficiency was achieved partly through the use of innovative e-commerce strategies. The study explores the hypothesis that the effectiveness of the business model used by the national project management team of the Framing the Future is due, in part, to the team's application of e-commerce strategies. The driver behind the national project management team's use of e-commerce strategies is the continual need to provide services to an increasing number of projects and team members, on both a one to one and a one to many basis.

The hypothesis continues: Framing the Future may currently be using some e-commerce strategies, but could go further down this path in future.

If the hypothesis is proven, the following benefits may ensue:

1. Framing the Future could increase its value to and impact on the National Training Framework, by applying additional e-commerce strategies for staff development purposes
2. Framing the Future could increase its value to the VET sector by being promoted as an exemplary e-commerce operation, providing a model for others to emulate, in the provision of national staff development.

RESEARCH STRATEGIES

The main research strategies for this study included:

- extensive interviews with Framing the Future staff
- examination of the Framing the Future office and its business processes
- conducting of interviews with the ANTA Project Officer, representatives of the Reference Group, customers and State and Territory contacts
- reviews of relevant aspects of the evaluations of Framing the Future
- benchmarking of Framing the Future's processes and critical success factors against two leading exponents of e-commerce, Fairfax Online and ABC Online
- research into Government online strategies and business models for customer service operations in the age of e-commerce, including disintermediation and reintermediation.

MAJOR FINDINGS

E-commerce involves using the power of electronics and digital data to:

1. develop new approaches to the bundling and unbundling of information products and offering multiple versions of products
2. customise existing data, to provide individualised services as well as catering for mass markets
3. provide customers with enhanced products and services in collaboration with complementary businesses
4. reduce prices so as to increase the reach of services in a mass market. (Electronic Trading Concepts et al, 1999)

This report shows that Framing the Future is using e-commerce approaches to improve business performance, such as improving its use of existing resources, enhancing its existing services and increasing its marketing reach. The study also indicates that Framing the Future is a model to other bodies within VET as to how the power of digital data and electronic communication can be used to improve performance.

POSSIBLE FUTURE STEPS

As a result of a benchmarking exercise with two of the leading e-commerce organisations in Australia, Framing the Future could now:

- actively review the project website, despite its continuing success, to adapt some of the techniques modelled on the websites of Fairfax Online and ABC Online
- pursue more market research information and review its marketing strategies
- identify additional opportunities to rebundle existing information, for more markets such as ACE and Schools
- use lessons learnt from Fairfax and the ABC to freshen the public image of Framing the Future
- develop a range of 'hooks' to capture new markets
- explore the issues involved with charging for some services and products, for reinvesting the income into additional services.

Framing the Future's pioneering use of electronic communication provides it with a foundation for the delivery of enhanced services, by using its digital data and electronic communication in new and different ways. Areas where it can profitably focus attention are:

1. deriving more information from its extensive database, in terms of customers' profiles, preferences and needs, to further improve customer service and to identify new services that could be offered

2. developing a vision statement for e-commerce
3. reviewing staff roles and resource allocation in terms of the 'e-vision'
4. identifying more markets that can be reached, using e-commerce, and developing a plan for each market
5. developing new performance measures based on an increased use of e-commerce
6. continually reviewing its performance, using leading e-commerce organisations for comparison
7. developing new strategic alliances, based on the use of e-commerce.

Another strategy to assist Framing the Future to increase its impact on staff development is to disseminate the findings from this report among Framing the Future stakeholders. The findings could become the basis of ongoing dialogue between the Framing the Future national project team with its customers. The dialogue could focus on the value of using e-commerce in VET, for improving customer service, for developing and delivering new services and for reaching new markets.

Dialogue about the use of e-commerce strategies for staff development in VET could also be conducted with peak bodies such as the EdNA VET Advisory Group (EVAG), industry groups and ANTA. In particular, the implications of this study could be discussed with EVAG in relation to the 'National Collaborative Framework for Flexible Learning in VET 2000-2004: Strategy 2000'.

Chapter 1
Introduction to e-commerce

This chapter provides a brief introduction to the concept of e-commerce in relation to VET and Chapter Two provides an overview of Framing the Future. A more indepth explanation of e-commerce is provided in Chapter Three.

REACTIONS TO THE TERM E-COMMERCE

In researching the topic of 'Framing the Future: an e-commerce operation', it became clear that the term e-commerce provoked strong reactions in the VET community. Many VET personnel were interested and even excited by the prospect of an educational business such as Framing the Future being analysed from the perspective of e-commerce. These personnel were often intrigued by the growth of attention in the media to e-commerce businesses such as Amazon.com, the publicity surrounding the listing on stock exchanges of companies such as ecorp and the high profile on the Internet of companies like ninemsn.com.au.

In conducting research for this report, other VET personnel reacted negatively to the concept of e-commerce, who suggested that commerce was about selling goods and making profits, while education was about learning and learners. This view was articulated regularly by personnel in the public service arena. The term e-commerce is certainly more comfortably applied to the corporate sector than to traditional public service activities. Perhaps a new term will be developed in future to replace e-commerce, to describe the use of digital data and electronic communication to provide human services such as VET services. Readers who have negative reactions to the term e-commerce are asked to look beyond the traditional connotations of 'commerce', and to consider the benefits of educational organisations taking advantage of e-commerce principles, to provide improved services. These e-commerce principles are set out in the report.

WHAT IS E-COMMERCE?

E-commerce or electronic commerce has been part of our lives in the 1990s, through electronic financial applications such as ATMs and EFTPOS. In the mid 1990s, the Internet led to the increase in the level of electronic commerce, through the use of email and file transfer. Many new e-commerce companies have been created in the late 1990s, to take advantage of new technologies. A brief definition was developed by the Commonwealth Government:

> E-commerce exploits the use of digital data and electronic communication. E-commerce is defined as any type of business transaction in which the participants prepare or transact business or conduct their trade in goods or services electronically. (*Australia's e-commerce report card*, 1999)

It is important to note that e-commerce does not need to replace all face to face contact: it can complement face to face interaction. An organisation may use a combination of e-commerce and traditional business processes to conduct its business. Framing the Future will be analysed as one such hybrid operation in this report.

Amazon.com is a well known example of a new e-commerce operation. Features of its business model include bypassing the retailer, speedy delivery, lower prices and additional services to customers, such as advice about other books similar to the one requested. Amazon.com cleverly uses the power of e-commerce to create a community of interested readers, who appreciate reading other readers' reviews of books. Amazon.com is now using the same platform to sell much more than just books. The way Amazon.com uses digital data and electronic communication to provide a range of innovative, customer centric services is very relevant to Framing the Future.

IMPERATIVES DRIVING E-COMMERCE

E-commerce is not just for retailing, banking, buying shares and booking airline tickets. In September 1999, the Commonwealth Government's National Office for the Information Economy published a report on e-health (Mitchell, 1999), showing the enormous potential for electronic communication to transform aspects of the delivery of Australian health services. The Commonwealth has indicated that it intends to promote the use of e-commerce in the education and health sectors.

It is important for businesses in the educational sector, including VET providers, to monitor the emergence of e-commerce, as it provides a different way of conducting business. It can create new ways of designing, producing, marketing, distributing and providing services in the education and training sector.

KEY E-COMMERCE PRINCIPLES

This report will show that informed businesses such as Framing the Future are using e-commerce approaches to improve business performance, such as improving its use of existing resources, enhancing its existing services and increasing its marketing reach. E-commerce involves using the power of electronics and digital data to:

1. develop new approaches to the bundling and unbundling of information products and offering multiple versions of products
2. customise existing data, to provide individualised services as well as catering for mass markets
3. provide customers with enhanced products and services in collaboration with complementary businesses
4. reduce prices so as to increase the reach of services in a mass market. (Electronic Trading Concepts et al, 1999)

During this report, the above four criteria will be used to evaluate the extent of e-commerce activity developed by Framing the Future.

Chapter 2
Framing the Future's evolution towards e-commerce

Framing the Future is an effective program funded by the Australian National Training Authority for the delivery of staff development programs across Australia (Field, 1998, 1999).

The aspect of Framing the Future that this study focuses on is the national project management that is physically based at Regency Institute of TAFE at Elizabeth in Adelaide, South Australia.

This national project management is a business operation, in that the team performs all the usual processes of a business unit: designing, producing, marketing, distributing and providing services and products. However, the national project management team does not work in isolation: it is part of a strong State and Territory network, with links to ANTA, industry and major TAFE bodies.

The diagram on the following page illustrates these connections.

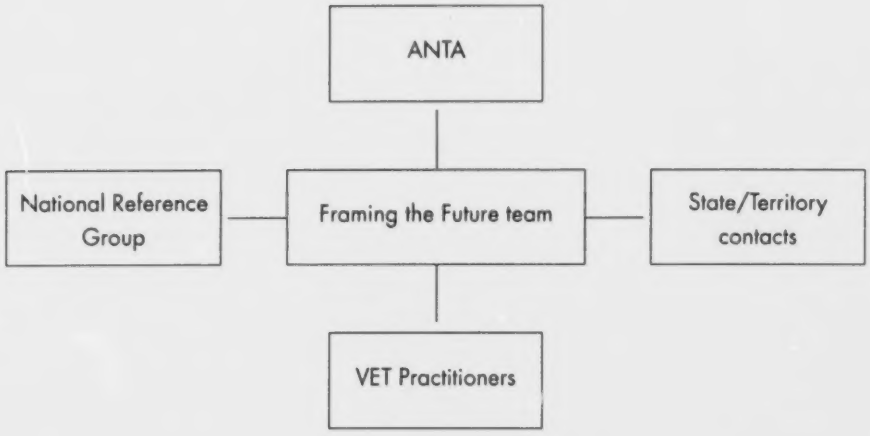

Diagram 2.1
Framing the Future's management network

BACKGROUND

Framing the Future has been judged a success by the external evaluator:

> Framing the Future exceeded all goals and expectations (Field, 1998, p5).
>
> Framing the Future has been a very efficient, cost effective approach ... (Field, 1999, p65).
>
> Framing the Future has achieved new levels of integration and quality. (Field, 1999, p65)

One of the factors responsible for this success is the approach used by the national project team (Field, 1999, p65).

This study analyses the business management processes used by Framing the Future's national project team. These processes include using a website, telephone, post, numerous publications and personal contact via workshops and visits. The processes have enabled Framing the Future to quickly respond to large numbers of applications: for instance, to distribute over 60,000 publications in 1999 and to cater for 5,307 participants in the 1999 round of projects. Of pertinence to this study of e-commerce, extensive use is made of the website and email.

The study explores the hypothesis that the effectiveness of the business model of the Framing the Future national project management team is due, in part, to the team's application of e-commerce strategies.

The full hypothesis is that Framing the Future may use some e-commerce strategies, but could go further down this path in future.

EVOLUTION OF BUSINESS PROCESSES

Four separate evaluations of Framing the Future (Field, 1998, 1999; Falk, 1999a, 1999b) directly or indirectly analysed aspects of the national project team's management processes. A brief examination of these evaluations will highlight the incremental development of e-commerce strategies within the Framing the Future operation. The following account will also refer to an internal report in 1997 by Brian Cramond, from the national project team.

Field (1998) identified three overlapping components in Framing the Future's first year, 1997:

- adviser training in each State and Territory, aimed at establishing a national network of advisers
- a series of workbased learning projects, in some cases (but not necessarily) undertaken by people who had completed adviser training
- use of a range of communication strategies, including the World Wide Web (WWW), to disseminate information, provide links and facilitate dialogue. (p3)

Field (1998) noted that the website was 'used by a surprisingly high 42%' (p7) of participants in the 1997 projects. Field also noted the development of an effective data base as one of the factors contributing to the 'high levels of customer service' (p9). The database that was used to capture project and adviser information 'evolved during the program' (p10). The importance of mining this database for more information will be discussed later.

The creation of a website for Framing the Future in 1997 as a project management tool in 1997 was very progressive. In October 1997, Brian Cramond, from the national project management team, explained the original rationale behind the website:

Information technology (IT) has been used since the inception of the initiative as the major communication channel between the project team and participants. Practical, on the ground information is available to individuals and organisations interested in the NTF and its implications. All people and organisations within the VET sector with an interest in implementing the NTF and workbased learning, but not actually part of the Framing the Future initiative, are also encouraged to contribute and share the available resources. The website provides a source of constantly updated information, and is a way of building a national community with a common focus.

Its major purposes are to provide:

- contact details for the Framing the Future management team
- an avenue for feedback to the project team about all aspects of the initiative
- help on using the various features of the website
- application details for the adviser network, and guidelines for applications for workbased learning project funding (during the early stages of the initiative)
- advisers' contact details and professional profiles to encourage sharing of ideas, collaboration, and networking nationally
- details of workbased learning projects including managers' contact details, project action plan and project focus. The intent is to encourage dialogue and collaboration between project participants nationally.
- regular information updates
- a communication channel for participants to contact the independent evaluator
- web forums for the easy exchange of information and discussion
- updates on the website and the initiative in "What's New"
- links to other resources.

Using websites in 1997 was novel and innovative, and the advantages for a national operation such as Framing the Future were immediately obvious. Brian Cramond felt that the website in 1997 provided the following benefits.

- Gives "faces" to the Framing the Future initiative.
- Makes accessing information related to the initiative fast and easy.
- The ability to rapidly make changes to respond to participants' needs and fast dissemination of new information where developments are occurring at a rapid pace.
- Allows and fosters communication between participants and each other, and the project team.
- Remote area access to information and communication. (Cramond, 1997)

Other benefits of e-commerce include fast information exchange and rapid updating of material:

Information can be disseminated quickly and efficiently. Some of the first applications were received in Adelaide from Broome and Darwin by email within one day of the initial advertisement appearing in the "Australian".

The Framing the Future website was established to meet the needs of participants at all levels. As these needs change and evolve the website is adapted to suit. One of the greatest advantages of IT is that changes can be made within minutes of new information becoming available. This feature is supported by the email mailing list, which can be used to advise participants of the availability of the new information. (Cramond, 1997)

Brian Cramond also noted that in 1997 the national project team had learnt a lot about the issues involved with a website, particularly with regard to acceptance of web technology:

> During the two day adviser workshops all participants were asked whether they had access to the WWW. About 90% of advisers have access to the web, although few used it as part of their day to day activities. The main reason for this was that they had no work related use for the web. The advisers were also questioned as to how many of them had access to the web a year ago, in each group there were generally only three or four in this category. *It is only now that this kind of project could be approached in this way.* (Cramond, 1997, italics added)

Support for users of the website was found to be important in 1997.

> Although the vast majority of participants in the initiative have access to the WWW and email, many are unfamiliar with their use. Some are still just coming to terms with using computers at all. We have found that support for new users is critical. It must be available on a needs basis and be able to respond to specific requirements. After one or two bad experiences many new users of technology will just give up. Another issue here is the level and availability of support at the user's location. Often this support, whether a government department or private enterprise, leaves much to be desired. (Cramond, 1997)

The development of e-commerce strategies by Framing the Future began in 1997. Brian Cramond's remarks above capture the early awareness by Framing the Future of the value of electronic communication and the new services that it made possible.

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INSIGHTS FROM 1998 EVALUATION

In the evaluation of the 1998 projects, external evaluator Field (1999) commented on the pioneering work of Framing the Future in 1997 in establishing a set of web based services.

> From the outset, Framing the Future's use of the Web has been one of its most innovative components. Now, 20 months later, one could easily forget that in mid 1997, the use of websites and email to send project documentation, inform potential participants about an initiative, and to conduct forums — all within a clean, consistent graphic interface — were fairly uncommon, at least in projects initiated from within the VET sector.

Field (1999) quoted a number of favourable comments from project teams.

> I believe that the technology side of things, the website and online forums have set a benchmark for national project management.
>
> The online facility is easily accessed, innovative and inspiring, and provides excellent support material.
>
> The web page is fantastic, and we have used it considerably throughout the project. A suggested improvement would be perhaps to increase the amount of material available on the website.

Field (1999) reported that 'between its establishment in mid 1997, and the time of producing this report (February 1999), there had been approximately 15,000 website hits'. Since 1997, a steady number of people have accessed the site (Figure 14). 'After the home page, the main pages which users have accessed are: Framing the Future projects; ordering Framing the Future publications; information about Framing the Future; the 'what's new' page; related links.' Field (1999) concludes ...

> This data suggests that a considerable number of staff in the VET sector are using the Framing the Future website to extend their knowledge. The 'projects' page is really a repository of information about past projects; the 'publications' page and the 'information' pages reflect interest in workbased learning and general aspects of Framing the Future; use of 'what's new' reflects quite high levels of interest in keeping up to date with recent program features; and 'related links' provides a doorway into learning about other VET sector programs and initiatives.

Field (1999) comments on the increase in popularity of the website in 1998.

> The site was generally seen as useful in 1997, but significantly more so in 1998. The most likely reason is that in 1998, more people in the VET sector had the skills in Internet use, and more had access to the necessary hardware and service providers. Moreover, there would have been a snowballing effect from the 1997 project round and from other general trends towards WWW use, with people hearing of the site, and realising that one could download project information.

Use of Web forums met with mixed success in 1997-98. Field (1999) found that 'the nature of the medium and associated software seems to account for the low levels of participation in this area'. However, specific forums conducted for the Certificate in Frontline Training (Action Learning) were more successful.

FACILITATORS' NETWORK

To strengthen the facilitators' network, Framing the Future contracted Enterprise Action (John Burgess) in 1999 to deliver the Certificate in Frontline Training (Action Learning), using a combination of face to face, teleconferencing and web based strategies. Falk (1999b) found that while the use of electronic communication was valued by the participants in the Certificate course, the participants still sought a degree of face to face contact. He noted that 'the ideal mode of delivery should consist of a blend of face to face modes, supported by self paced means such as print and/or electronic support'.

Cost effective, nation wide delivery of the Certificate in Frontline Training has been made possible by the availability of electronic communication. Framing the Future learnt from the pilot Certificate course in 1998 that a combination of electronic and face to face contact was desirable, and has followed this path in 1999.

SUMMARY

This brief survey of Framing the Future's use of e-commerce strategies from 1997-99 has provided a snapshot of an innovative, small business operation effectively using electronic communication to enable it to provide a nation wide service. Framing the Future entered the world of websites before most people in VET had become familiar with the web, in 1997, and the benefits of this e-commerce strategy paid dividends immediately.

Chapter 3
E-commerce explained

This chapter extends the brief introduction to e-commerce provided in chapter one. It provides a fuller explanation of the origins, rationale and directions of e-commerce, as a background to the analysis of Framing the Future in the subsequent three chapters.

DEFINITIONS

E-commerce is part of the broader development of the information economy. Definitions of these two terms are provided in the table below.

Term	Definitions
Information economy	'the new world of social and commercial interaction, brought about by advances in information technology' (*Towards an Australian Strategy for the Information Economy*, 1998)
E-commerce	'every type of business transaction in which the participants (ie suppliers, end users, etc) prepare or transact business or conduct their trade in goods or services electronically' (*Australia's e-commerce report card*, 1999)

Table 2.1
Brief definitions of key terms

Each of these two terms is discussed in more detail on the following pages.

INFORMATION ECONOMY

A wide array of information and telecommunication technologies are having an enormous impact on Australia, bringing about changes in jobs, communication patterns and aspects of our society and economy. Observers have coined the term 'information economy' to describe some of the effects of these technologies. *Towards an Australian Strategy for the Information Economy* (Ministerial Council for the Information Economy, July 1998) defined the information economy as follows:

> The new world of social and commercial interaction, brought about by advances in information technology, has come to be called the information economy. (p2)

The report documents a major shift in the way we live and learn and work in Australia.

> It is part of a global change — the coming of the information society.
>
> In Australia, and in many places around the world, students now use computers at home and school to research projects; governments supply information and services online, so that citizens needn't leave home to lodge forms or get the help they want; farmers access product information and markets by internet; people do banking — borrowing, transferring and investing money — electronically; businesses offer their goods and services for sale on websites, and consumers make purchases by browsing virtual shops and sending orders and payment over the net; friends and family members keep in touch with each other over long distances, by sending email messages; businesses exchange documents instantly and without paper; students do university degrees and professional training online; people interested in films, books, hobbies, anything, can meet like minded people from around the world in chat rooms to share their interest. (pp2-3)

The report summarises the Government's vision for Australia in which all Australians have improved access to health, education and government services.

> In education, online technologies also offer the potential to transform the ways in which teaching and learning occur. For rural and remote Australia, online technologies offer a unique opportunity to address educational disadvantage stemming from the tyranny of distance. (pp24-25)

Three of the eight specific *education* strategies in the document relate directly to VET:

1. Utilising the research capability and education training function of regional, as well as metropolitan, universities and TAFEs as key centres in the development of the information economy; for the skilling of information professionals; for raising the general skill level of the population; for providing learning resources to address changing learning needs in our society and for development of software and hardware products.
2. Encouraging links among universities, research organisations and other education and training providers as an impetus to the development of business and industry innovation, including new information based technology applications, products and services.
3. Ensuring that our education system provides the tools for lifelong learning so that all Australians are better equipped to benefit from the changes that are occurring... Our vocational education and training systems and higher education institutions must ensure that all graduates have the confidence and skills to apply information and communications technology in basic, applied and strategic research and in the workplace. (*Towards an Australian Strategy for the Information Economy*, p26)

It is noteworthy that the *Framework for National Collaboration in Flexible Learning in Vocational Education and Training 2000-2004* produced by the EdNA VET Advisory Group (EVAG) in mid 1999 emphasised the information economy. The report provided the following definition of 'The Flexible Learning Mission':

> To add value to Australia's VET system by helping our industries and our citizens make a rapid and successful transition to the Information Economy.

E-COMMERCE

The information economy is the 'new world of social and commercial interaction, brought about by advances in information technology'. Electronic commerce or e-commerce is the descriptor of a new way of doing business in the information economy.

Australia's e-commerce report card (Department of Communications, Information Technology and the Arts, April 1999) defines e-commerce as follows:

> For the purposes of this report e-commerce is defined *as every type of business transaction in which the participants (ie suppliers, end users etc) prepare or transact business or conduct their trade in goods or services electronically.* The scope of e-commerce is wide, covering all forms of electronic processes. Online technologies are the most significant facets of e-commerce and include Internet retailing, Electronic Data Interchange, Internet banking, electronic settlements and browsing and selection of products and services over the Internet. (p3)

The Report Card notes that there are several economic imperatives for increasing the uptake of e-commerce in the Australian business sector, such as:

> - lowering the cost of doing business through lower transaction costs and faster and more efficient payment from suppliers and/or customers which increases cashflow
> - the competitive business advantages afforded by e-commerce such as opportunities to adopt new business models and to develop and tailor more efficient customer support
> - reductions in inventory lowering the holding costs of goods
> - expansion to potential market reach
> - increasing speed to market
> - 'trickle down' effect through a supply chain as suppliers come online. (p8)

In the introduction to *Australia's e-commerce report card* (1999), Richard Alston, Minister for Communications, Information Technology and the Arts, notes that it is the Internet component of e-commerce that is new, not e-commerce:

> Electronic commerce is not new — we take it for granted through our current use of EFTPOS and Automatic Teller Machines. Industry, particularly the financial services sector of the economy, would be uncompetitive without electronic commerce. What is new is the emergence of Internet commerce, which enables the benefits of electronic commerce to be more widely available through industry and the economy. (p1)

The Minister then comments on the value of e-commerce for customers and for the Government in providing services. His comments address the concerns of those educators who query the relevance of e-commerce to education:

> Electronic commerce offers considerable new business opportunities and benefits in terms of cost savings for business. It empowers consumers, giving them more information on which to base their decisions, more choice in their source of supply and a greater ability to demand customised goods and services. It enables governments to improve the quality and effectiveness of services to the community and to be more responsive to community needs. (p1)

Improving the quality of educational services to the community and being more responsive to community needs is a core aim of the educational sector.

ORIGINS AND GROWTH OF E-COMMERCE

As Senator Alston commented, e-commerce was first evident in Australia through banks in particular using EDI, EFTPOS and ATMs. Then during the 1990s we witnessed the growth of Intranets, the Internet, and in particular the use of email, file transfer. In recent years security protocols have been developed, minimising the risks of financial transactions over the Internet and enabling banks, in particular, to offer extensive 'home banking' services. The Internet is now used for a variety of business activities: market research, marketing, selling any goods and many services.

E-commerce is permanently destroying some old ways of doing business and creating new ones. It impacts on all business processes: design, production, marketing, distribution, sales and service. For example, e-commerce strategies can be used to market to one person or to the mass; to provide new, enhanced customer service; to rebundle existing products; and to establish creative alliances with other companies. Hence, new strategies are required for planning and managing each business.

The way e-commerce is changing business is illustrated by the following diagrams comparing the traditional structure of an hierarchical organisation with the apparently random structure of the world wide web, a 'hyperarchy'. The hyperarchy provides us with a new analogy for how businesses can be structured to take advantage of the web era.

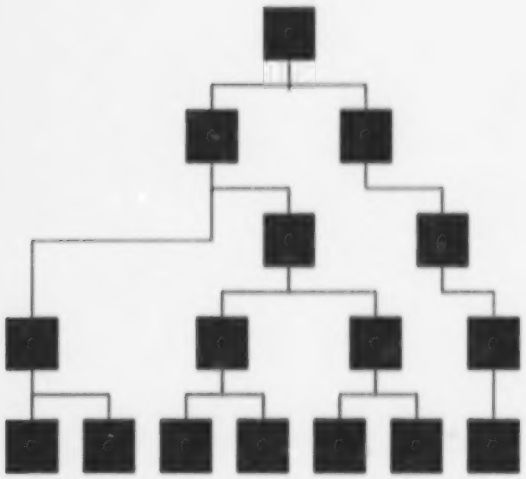

Diagram 3.1

Hierarchical organisation (from Evans and Wurster, 1999, p20)

'In a traditional organisation, senior executives have a wider span of knowledge than do their subordinates'. (Evans & Wurster, 1999, p20)

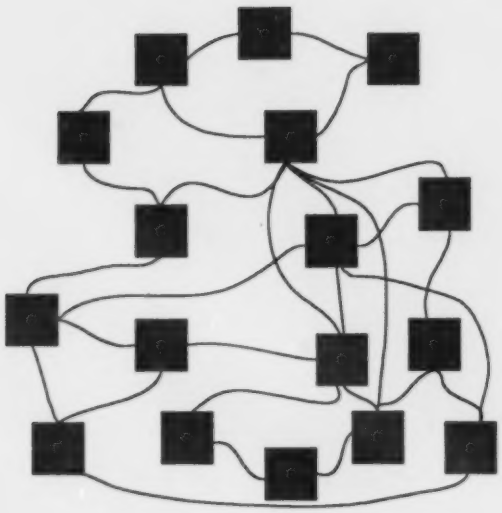

Diagram 3.2
Hyperarchy (Evans & Wurster, 1999, p21)

'The world wide web is a hyperarchy'. 'Hyperarchy challenges all hierarchies... with the possibility ... of random access and information symmetry. It challenges all markets with the possibility that far richer information can be exchanged... When the principles of hyperarchy are thoroughly understood, they will provide a way to understand not only positioning strategies within businesses and industries but also more fundamental concepts of corporate organisation and identity. (Evans & Wurster, 1999, p21)

Framing the Future has developed characteristics of a hyperarchy, with its small staff, flat management structure, network of contacts and use of electronic communication to be responsive to a national market.

ELECTRONIC COMMERCE ACTIVITIES IN AUSTRALIA

The Australian Bureau of Statistics, in its publication 'Use of the Internet by Householders, Australia', May 1999, reported that there were three million Internet purchases in the preceding twelve months.

Purchasing/ordering goods or services via the Internet

Nearly 5% of Australian adults (650,000) used the Internet to purchase or order goods or services for their own private use in the 12 months to May 1999. These Internet shoppers made an estimated 3 million purchases or orders via the Internet and nearly 76% of Internet shoppers paid for their purchases online.

By comparison, in the 12 months to May 1998, an estimated 409,000 adults purchased or ordered goods or services via the Internet.

Nearly 71% of Internet shoppers (459,000) were at home when making purchases or orders via the Internet. Just over 41% of Internet shoppers made their purchases only from Australia, 43% made them only from overseas, and 16% from both Australia and overseas.

Number of purchases

Of the 650,000 Internet shoppers:

- 30% made one purchase or order via the Internet
- 22% made two
- 18% made three
- 3% made four
- 22% made five or more.

The ABS report showed that the main purchase over the Internet were for books or magazines, computer software or equipment, music, clothing, shoes, holidays, entertainment and sporting equipment.

Types of goods or services purchased or ordered via the Internet

Of the 650,000 adults undertaking purchases or orders via the Internet in the 12 months to May 1999:

38% reported purchasing books or magazines
34% reported purchasing computer software or equipment
14% reported purchasing music
11% clothing or shoes
9% holidays
8% tickets to entertainment events
4% sporting equipment.

Expenditure on goods or services purchased via the Internet

Of the 650,000 adults making purchases via the Internet in the 12 months to May 1999:

14% spent up to $50 on Internet purchases
22% spent $51-$100
21% spent $101-$250
13% spent $251-$500
29% spent more than $500.

Total online expenditure

Of the 492,000 Internet shoppers at May 1999 who paid for their purchases online:

14% spent up to $50
28% spent $51-$100
28% spent $101-$250
10% spent $251-$500
20% spent more than $500.

COMMONWEALTH GOVERNMENT STIMULUS FOR E-COMMERCE

The Commonwealth Government released a number of major reports from July 1998 to April 1999 to stimulate the growth of e-commerce. For instance, *Australia's e-commerce report card* (1999) identified a range of e-commerce priorities and activities as outlined below.

1. Establishing the environment conducive to the widespread adoption of e-commerce.
2. Demonstrating the business case.
3. Targeting barriers to the development of e-commerce.
4. Maximising the efficiency dividend from e-commerce for the economy at large.

A number of case studies are highlighted throughout the *Report Card* to demonstrate real business examples of adopting e-commerce. These show businesses using e-commerce as a key tool to improve efficiencies and increase revenue as they adopt e-commerce strategies as part of a broader business plan.

Disintermediation and reintermediation

The business practice of 'disintermediation' is a common feature of e-commerce. Disintermediation involves the elimination of many of the 'middle men' or intermediary business processes that are normally involved in the business cycle, such as transportation, wholesaling and retailing. Amazon.com is a popular example of a business modelling disintermediation, by eliminating conventional book resellers. Amazon.com customers order online and the book is despatched directly from Amazon.com's warehouse to the customer, obviating the need for a retail shop.

Many people fear that disintermediation will lead to the loss of jobs. To confirm these fears, the Australian weekly business magazine BRW identified the following list of ten careers that are in peril because of the Internet.

1. Bank teller
2. Car dealer
3. Stockbroker
4. Financial adviser
5. Insurance broker
6. Travel agent
7. Mortgage broker
8. Toy retailer
9. Market researcher
10. Wine merchant.

(BRW, September 17, 1999, p71)

However, just as e-commerce threatens some traditional jobs, it creates new ones, through the process of reintermediction. Reintermediation provides opportunities for information brokers to save the consumer time by undertaking 'product search, evaluation and distribution in the form of virtual malls or online auctioneers' (Lawrence et al, 1998, p235). The business pages of magazines and newspapers contain many references to new businesses that have started in 1998-99 due to the availability of the Internet and the clever identification of new niche markets, such as providing remote secretarial or research services. ANTA CEO Moira Scollay emphasised the opportunities of 'reintermediation' in her address at the launch of Adult Learning Australia (ALA) in Sydney in mid 1999. Ms Scollay reflected on the emerging business strategy of *reintermediation*: putting back into a customer product or service what customers can't get from the direct mail or Internet Marketers or the impersonal 'city' providers.

E-commerce is quickly creating many new jobs in Australia. In discussing the impact of e-commerce, James Kirby (BRW, September 17, 1999) notes that 'The real change is the job opportunities that never existed before and which are now popping up across Australia' (p68). BRW's panel of experts selected the ten start up companies in the new economy that illustrate the range of new jobs available.

Company	Business
Davnet	Designs and installs Internet services in commercial buildings
eBay	Online auctions
Eclipse Group	Internet services and content
FreeOnline	Free access to the Internet
Hubub	Designs and installs e-commerce systems for whole industries
Internet Icons	Do it yourself Websites
Seek Communications	Recruitment, consultancy, personnel services
Sinewave Interactive	Tracking web activity, for marketing purposes
Sprint	Distributing CDROMs and developing Internet games
Tradegate	Provides e-commerce expertise

Table 3.1

Start Up Companies in the New Economy (BRW, 17 Sept, 1999, p72), illustrating the new jobs available

Don Tapscott, *Creating Value in the Network Economy* (1999), argues that businesses need to reinvent their business models around the Net or they will be bypassed:

> When it comes to creating value in the network economy, questions still outnumber answers. But the evidence is growing. Firms that don't reinvent their business models around the Net will be bypassed and fail. In the year 2020, we are likely to look back and see that companies fell into the categories of those that 'got it' and those that didn't. (p.xxvi)

CONTEXT FOR FRAMING THE FUTURE'S E-COMMERCE

The above discussion of e-commerce provides a framework for analysing the business management processes of Framing the Future, to determine to what extent e-commerce processes are used by the national project team. In the following chapters, evidence will be sought of the following features of e-commerce within the Framing the Future operation:

- the use of electronic communication to lower the cost of doing business through fast and efficient communication with customers
- the use of online technology to develop and tailor more efficient customer support
- the use of online technology to increase market reach
- the provision of online ordering of publications
- the rebundling of existing digital information.

Framing the Future will also be examined as an example of 'reintermediation', ie 'info mediaries' (Lawrence et al, 1998, p235).

Chapter 4
Analysis of Framing the Future's business processes

The previous chapters provided a definition of e-commerce and a report on Framing the Future's early identification of e-commerce strategies in 1997. To determine to what extent the national project team for Framing the Future uses e-commerce processes, three major research activities were undertaken.

1. The business processes of the office and staff were examined. The report on the examination is provided in this chapter.
2. A benchmarking exercise was undertaken, comparing Framing the Future with two leading Australian examples of e-commerce. The benchmarking study is discussed in Chapter Five.
3. Personnel involved with Framing the Future were interviewed. Their comments are reported in Chapter Six.

HYPOTHESES AND QUESTIONS

To investigate Framing the Future's business management processes, a set of hypotheses and questions were developed. Hypotheses included:

- Framing the Future business management involves providing a wide range of services, from publishing, to mentoring, administering, teaching, brokering, advocacy and customer support.
- The business processes within Framing the Future have been efficiently organised, such that the office is an example of the 'disintermediation' and reintermediation business model that is central to e-commerce.

- The project management's use of electronic communication (e-commerce) represents a new style of management, and has enabled it to provide outstanding customer services, regardless of its geographical location. As 1999 is the Year of Government Online, Framing the Future could be an examplar of how to use e-commerce to manage large numbers of projects nationally.

Questions that framed the study included:

- How has Framing the Future created a sense of affiliation for project participants? Was the creation of a sense of affiliation accidental or deliberate? How is this sense of affiliation nurtured and maintained? How important is this sense of affiliation for the teams? Is this affiliation an example of a 'virtual community', nourished by the website and other mechanisms?
- What functions does the website perform? Which functions enable Framing the Future to be more efficient? Which functions enable Framing the Future to achieve things not otherwise possible? What was deliberate and what evolved?
- What are the business processes of Framing the Future?
- What are Framing the Future's products and services?
- Who are Framing the Future's customers?
- What are Framing the Future's core competencies?
- What are Framing the Future's critical success factors?
- How are Framing the Future's internal services organised?
- What specifically e-commerce strategies are used by Framing the Future?

The issues raised by these hypotheses and questions are discussed in the next two chapters.

FRAMING THE FUTURE'S WEBSITE

Framing the Future's website <www.tafe.sa.edu.au/institutes/para/ftf/home.htm> was analysed in terms of how well it satisfied the following criteria, based on an article from "Marketing & Design Daily", Feb 13, 1998. The analysis shows that the website is a critical operational and strategic tool for Framing the Future.

In terms of e-commerce, Framing the Future's website is among the leading sites in VET. In particular, the facility for users to order publications online or to download many publications is, together with the ANTA site, an exemplary model in the VET community. The website is also a key to some of Framing the Future's other e-commerce activities, such as:

- marketing to individuals as well as to groups
- providing enhanced services
- bundling existing digital information such as pamphlets into new online formats.

Criteria for assessing a website	Achievements and value of Framing the Future's website
1. Content: provides useful content	Statistics provide daily/monthly summaries of the number of time groups of pages within the website are accessed. This information is used as a guide in the development and maintenance of the site. The statistics identify access rates and quantify the amount of web traffic during the various phases of the year, such as when funding is available and guidelines and proformas are being downloaded as Word documents.
2. Context: content is relevant to audiences	All content is directly related to activities within Framing the Future. The site aspires to be a one stop shop for access to information about VET in Australia with links where appropriate and purpose designed materials where it cannot be accessed from elsewhere.
3. Community: visitors feel part of a community; a relationship is developed and maintained	The site is designed to have uniformity of language, context, look and feel with all other aspects of Framing the Future. Photographs are used sparingly to give 'faces' to the online presence.
4. Continuity: the online offerings are aligned with the off line offerings	The alignment is extremely close, especially in terms of the publications where many (not all yet) are available for ordering online (in print form) as well as being able to be viewed online (the same material modified for web presentation with hyperlinks where appropriate).
5. Change: the site is updated and not stagnant or boring	The website content is updated whenever needed, often daily, or more than once daily. As team members are involved in considerable travelling there is the capacity to update the site from anywhere, at any time in Australia. Cosmetic changes are made to the look of the website on occasions to give it a 'fresh' look.

Table 4.2

The value of Framing the Future's website

FRAMING THE FUTURE'S PRODUCTS AND SERVICES

In order to determine Framing the Future's e-commerce activities, it is necessary to identify its products and services in staff development. The following table provides a summary of its products and services.

It is important to note that almost all of these products, except for the marketing items (such as computer mouse pads) and a few of the services (eg the face to face workshops) are delivered electronically, to some extent. Framing the Future has been able to enhance its reach and impact by its significant use of its website and other electronic communication such as email.

The above table does not highlight the fact that many of the products and services are intangible, involving the transfer of intellectual property to VET knowledge workers.

Framing the Future's provision for online ordering from its website is very popular with users. The following table sets out the numbers of publications requested and distributed in 1999, and the three main sources of the requests.

Table 4.4 illustrates that Framing the Future's publications reach many more personnel than just those personnel in the projects. The ability to order publications from the website provides a popular way for anyone interested to obtain copies of the publications.

Category	Framing the Future's Products and Services in Staff Development
1. Key products provided by the national project office.	1. publications 2. the website 3. marketing items
2. Key services provided by the national project office.	4. the provision of information to project teams, their organisations, ANTA and industry 5. the handling of the application process and the reporting process 6. the provision of support for facilitators, for instance with the Certificate IV course 7. the conducting of workshops

Table 4.3

Framing the Future's Key Products and Services

Publication titles	Source of request:		
	General FTF Contacts	99 Projects (Only)	Conferences & Forums
Projects 98	129	173	407
Evaluating Projects Flyer	591	1263	623
Projects 98 / 99	108	694	3
Evaluating Workbased Learning – A model	214	1248	123
Everything You Wanted to Know about Training Packages	4156	1351	1071
Evaluation 98	632	1263	623
Facilitation Tips	597	1679	473
Workbased Learning – A Ready Reference	2701	2003	1071
Ideas to Action	1350	1973	1071
People, Places and Projects	796	1973	1071
Framing the Future Communication Flyer	2145	1490	1568
Approach to Staff Development	1211	1414	1068
Facilitating Workbased Learning	2381	2003	1071
Participating in Workbased Learning	2736	2003	1071
Action Learning – The Formula	1690	2003	1071
Website Design Tips	1093	2003	1071
Framing the Future Website Flyer	1483	2003	1071
Workbased Learning Flyer	2756	2003	1071
TOTAL PUBLICATIONS DISTRIBUTED, 1999	26,769	28,542	15,598

Table 4.4

Framing the Future's Publications dispatched in 1999, by source of requests

FRAMING THE FUTURE'S CUSTOMERS

It is important to identify Framing the Future's customers, in order to assess the value of e-commerce from the customers' point of view. Discussions with the national project team provided the following profile of the customers.

This quick profile of Framing the Future's customers demonstrates the challenge Framing the Future has of satisfying such a geographically spread group of adults, with limited time and urgent needs for information. Electronic communication is obviously a key way to satisfy such a customer base.

Customer Segment	Framing the Future's Customers
1. Identified by age	Predominantly in the age group 35-55
2. By the location where they live or work	Around Australia
3. By their personality and lifestyle	Busy professionals
4. By their attitudes to and use of products	In almost every instance, users sense an imperative to access up to date information relating to the National Training Framework

Table 4.5

Framing the Future's customers for staff development

FRAMING THE FUTURE'S INTERNAL SERVICES

E-businesses eschew traditional hierarchies and bureaucratic procedures. Common features of e-businesses are the focus on managing enormous amounts of data by using a digital database; changing internal jobs to suit required tasks rather than clinging to traditional clerical and administrative roles; and having a flat management structure, to facilitate the provision of just in time, just for me customer services. Information in the following table shows that Framing the Future has emulated the above features of e-businesses.

Generic Internal Services	Framing the Future's Internal Services
1. Administration	The responsibilities of the staff of Framing the Future are directly related to customer needs: eg, management of contracts; provision of publications; organisation of workshops; updating of website.
2. Systems	An inspection of Framing the Future's offices reveals the efficient systems available for tracking the stages reached by the multiple projects; the systems for handling paper records such as contracts and reports; the systems for dispatching publications; and the systems for entering data into the database.
3. Quality	Framing the Future has developed a number of quality customer service systems: eg immediate notification to successful tenderers; all unsuccessful tenderers are contacted automatically and within 24 hours of return calls; and the telephone system at Framing the Future is organised so that normally the individual staff member is contacted directly by incoming callers.
4. Finance	The financial system is TAFE SA's system.

Table 4.6

Framing the Future's Internal Services

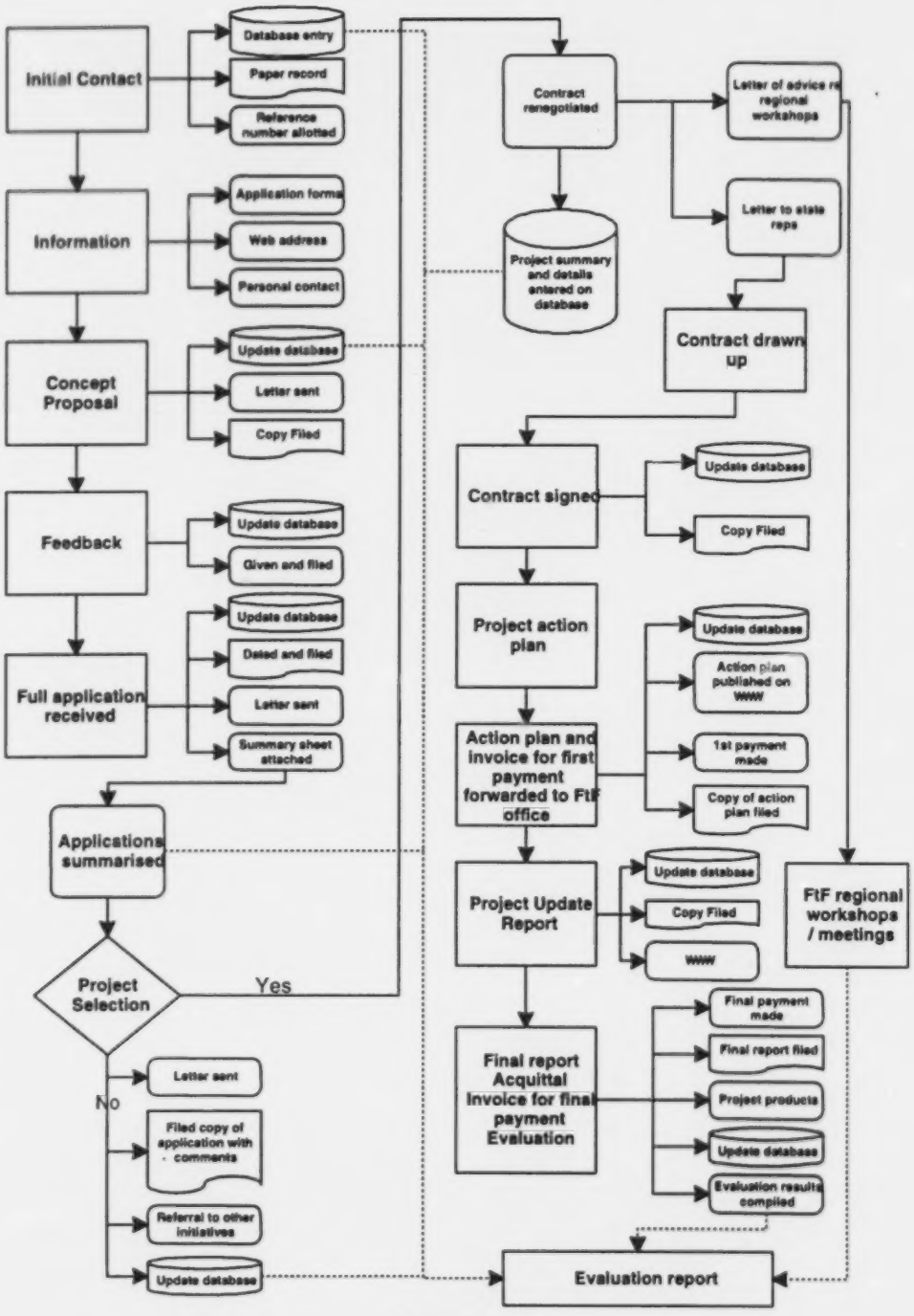

Diagram 4.1

Framing the Future's Project Administrative Processes

BEST COPY AVAILABLE

The previous summary of the internal processes of Framing the Future showed that they are streamlined to suit the customers' needs, not the convenience of the staff. This approach has led to fast response times to queries about project matters or to requests for publications. Customers have also articulated on many occasions (Field 1998, 1999) that they feel that their needs are attended to directly and personally.

These internal processes involve a combination of traditional, paper based activities and the appropriate use of the website, email and telephone. From the perspective of e-commerce, the Framing the Future national project team is increasingly using the database to compile digital data about teams, their progress, participants and records. Additional effort has been applied to improving the database in 1999 and Framing the Future has the opportunity to use this database to interpret customers' needs, to anticipate their wants and to provide enhanced services in future.

The diagram on the previous page summarises the administrative processes used by Framing the Future with the many teams serviced each year. These processes have evolved in order to provide ideal support for the staff development undertaken by each Framing the Future project. Importantly, the database is updated at ten points during the processes summarised in the diagram. Hence, extensive data is available in an easy to access digital format. Framing the Future is also able to 'mine' this digital data, in order to identify possible new services that it can provide to its customers.

This data mining has become a new focus in 1999 and promises to lead to an enhanced knowledge of the current and past project teams, resulting in improved services for both previous and future participants.

FRAMING THE FUTURE'S E-BUSINESS PROCESSES

This chapter on the operations of the Framing the Future national office shows that the national project management team uses a range of e-commerce strategies to enable it to meet both mass market and individual demands and to provide a low cost, high speed, very reliable and high quality service. Internet information processes enable new styles of relationships and Framing the Future uses these new processes extensively.

There are a number of processes enabled by e-commerce, as set out in the following table.

e-commerce processes*	Framing the Future s e-business processes
1. Uses the power of electronics and digital data to develop new approaches to the bundling and unbundling of information products and offering multiple versions of products	Framing the Future's provision of a range of texts in both print form and via the website is exemplary.
2. Uses the power of electronics and digital data to customise existing data, to provide individualised services as well as catering for mass markets	Framing the future has serviced over 300 projects and 5,000 participants since 1997, using its website extensively to provide both generic and specialist information.
3. Uses the power of electronics and digital data in collaboration with complementary businesses, to provide customers with an enhanced product/service	Framing the Future combines with many other Government and non Government providers, to ensure customers are aware of the latest developments in relation to the National Training Framework.
4. Uses the power of electronics and digital data to reduce prices so as to increase the reach of services in a mass market	Framing the Future effectively caters for participants across the whole of Australia, with the clever combination of web based information, email and phone contact and workshops and provision of specialist courses.

* e-commerce characteristics adapted from Electronic Trading Group et al, 1999

Table 4.7

Framing the Future's e-commerce processes

This brief study of Framing the Future and its use of e-commerce reflects the following trends in business:

> The Net provides a new, function rich, high capacity, and nearly ubiquitous infrastructure for business. It enables firms to enrich products with information, knowledge, and services for unique competitive advantage. (Tapscott, 1999, p.vii)

> Knowledge permeates successful organisations. It resides in network digital documents and in the internet worked minds of knowledge workers. The Net is a new infrastructure for the sharing and management of knowledge within and between firms. It enables the networking of human intellect, know how and ingenuity. (Tapscott, 1999, p.viii)

EXPLOITING THE VIRTUAL VALUE CHAIN

This chapter concludes with a concept that is very relevant to the above discussion of how Framing the Future has exploited the use of its digital data and electronic communication to provide new services. The new concept is the 'value chain' and a variant, the 'virtual value chain'.

> The value chain is a model that describes a series of value adding activities connecting a company's supply side (raw materials, inbound logistics, and production processes) with its demand side (outbound logistics, marketing, and sales). (Evans & Wurster, 1999, p36)

In the traditional physical value chain, information is treated as a 'supporting element of the value adding process, not as a source of value itself' (Evans & Wurster, 1996, p36). However, with the availability of the Internet, there is now a 'marketspace' for information products that did not exist before the advent of the Internet. Businesses can now collect raw information and add value to it. For instance, Framing the Future saw the opportunity in 1997-98 to take their printed reports and pamphlets and to translate them into HTML for posting on their website. Framing the Future has collected enormous data on projects and teams over the period 1997-99 and is now in a position to add value to that raw data by developing enhanced customer relationships and to provide a suite of tailored services.

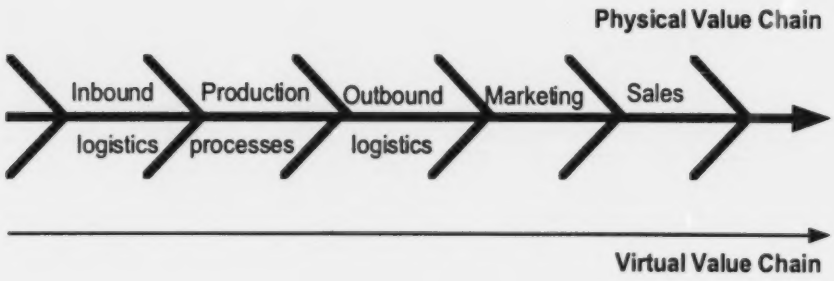

Diagram 4.1

Building the Virtual Value Chain (Evans & Wurster, 1999, p39)

'When companies integrate the information they capture during stages of the value chain – from inbound logistics and production through sales and marketing – they construct an information underlay of the business. This integrated information provides managers with the ability to "see" their value chains from end to end.' (Evans & Wurster, 1999, p39)

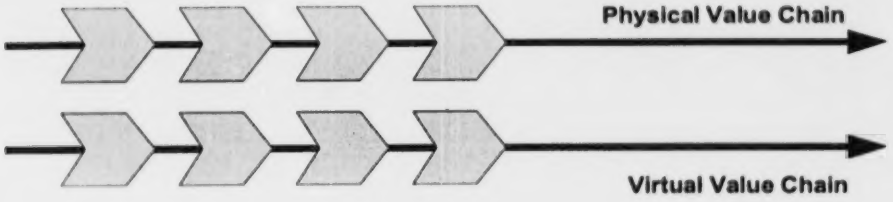

Diagram 4.2

Exploiting the Virtual Value Chain (Evans & Wurster, 1999, p41)

> 'With an integrated information underlay in place, companies can begin to perform value adding activities more efficiently and effectively through and with information. In other words, those information based activities mirror steps in the physical value chain. When companies move a number of value adding activities from the marketplace to the marketspace, they exploit a virtual value chain.'
> (Evans & Wurster, 1999, p41)

Framing the Future has effectively exploited the virtual value chain through its vigorous use of the website, email and other electronic communication over the period 1997-99. It is now positioned well to further exploit this value chain in the future.

Chapter 5 Benchmarking against Fairfax Online and ABC Online

A benchmarking activity was undertaken to identify areas where Framing the Future could improve and extend its e-commerce strategies and impact. Two leading Australian e-commerce businesses, Fairfax Online and ABC Online, were selected for the benchmarking exercise. The benchmarking was conducted in collaboration with the national project management team.

BENCHMARKING PROCESS

Benchmarking is a continuous improvement tool for increasing the competitive performance of Framing the Future in its key business processes. The benchmarking activity for this study involved benchmarking some of Framing the Future's core processes (eg design, production, marketing, distribution) with best practice by other service providers outside of the mainstream education sector. The aim of the benchmarking exercise was to provide Framing the Future with new goals and a pathway towards achieving world's best practice in service delivery.

The benchmarking followed the following steps.

Step 1: A discussion of the value of benchmarking for continuous improvement and how to use benchmarking for competitive advantages.

Step 2: The identification of the Program's core competencies, key business processes and critical success factors.

Step 3: Identification of world class business processes, using secondary sources and the World Wide Web to obtain exemplars and to select best in class organisations for analysis.

Step 4: Identification of best practice in the selected organisations, through an analysis of relevant documentation.

Step 5: Analysing performance gaps through evaluating the data collected about best practice and identifying gaps in Framing the Future's performance in the use of e-commerce.

Step 6: Developing new goals for adapting e-commerce best practices to Framing the Future.

FRAMING THE FUTURE'S CORE COMPETENCIES

For the purposes of this study, core competencies are defined as *strategic business capabilities* that provide Framing the Future with a market place advantage. Core competencies cut across all key business processes and it is normal to have only a handful of core competencies.

Research for this study indicated that core competencies of Framing the Future include:

- networking capabilities
- capability of providing quality publications.

It is important to note that Framing the Future uses digital data and electronic communication to underpin both of these core competencies. While the personalities of the staff are critical in networking, the use of e-commerce is fundamental to the impact of the national project team. To provide quality publications, Framing the Future uses the website as the major tool for ordering.

FRAMING THE FUTURE'S KEY BUSINESS PROCESSES

Key business processes are processes that are critical to the Framing the Future's provision of services. The table below identifies the influence of e-commerce on the performance of these business processes.

FRAMING THE FUTURE'S CRITICAL SUCCESS FACTORS

Critical Success Factors (CSF) are quantifiable measures for effectiveness, economy and efficiency (Watson, 1992). They are the indicators of performance in a key business process. Some examples are:

- the business process is the planning and preparation of new services; the CSF is the time to market of the new service
- the business process might be the provision of online support; the CSF is the reliability of the electronic infrastructure.

Critical Success Factors have the greatest bearing on the processes achieving the highest possible level of performance.

Key Business Process	Framing the Future's Processes
1. Design	Framing the Future effectively identified and has repeatedly reproduced a distinctive 'FF' logo using a recognisable red, black and white colour scheme. The brand name 'Framing the Future' has become known around Australian VET. From an e-commerce perspective, Framing the Future has effectively reproduced this motif on the website.
2. Production	Framing the Future has commissioned a regular stream of high quality, attractively presented publications that are distinguished by being easy to read. From an e-commerce perspective, Framing the Future has made almost all of these publications available on the website.
3. Marketing	Strategies for marketing of Framing the Future range from the use of ANTA's Fast Facts, to articles in journals, to the distribution of pens and computer mouse pads. However, a major strategy is the use of the increasing network of project teams and facilitators as ambassadors for Framing the Future. From an e-commerce perspective, Framing the Future's website is one of the outstanding ones in VET, it was one of the first large VET sites established in 1997-98 and it is used for a wide range of purposes.
4. Distribution	To deliver its products and services, Framing the Future uses a combination of workshops, publications and specialist courses, such as the Certificate IV in Frontline Training (Action Learning). From an e-commerce perspective, Framing the Future uses its digital database and electronic communication to provide information and publications to customers.
5. Sales/Service	Once a group has applied for Framing the Future funding, it benefits from the refined systems for contacting project teams, via the Web, email, post, workshops and phone. From an e-commerce perspective, Framing the Future uses the Web, email and the phone, in conjunction with the database, to provide fast and efficient service.

Table 5.1

Framing the Future's business processes

OTFE's Online Benchmarking Manual (1998) identified Critical Success Factors and their associated Performance Indicators, for Online Teaching and Learning. Many of these CSFs could be applied to Framing the Future. Samples of Critical Success Factors from the OTFE report are:

1. the nature (cost, quality, ease of access) of the learning environment
2. the nature (user satisfaction levels, costs, range of systems) of the communication systems
3. the nature of the teacher processes (qualifications, staff turnover, range of staff development opportunities)
4. issues regarding the learning resources (wait time; range; student satisfaction)
5. relationship issues for providers/partners (eg satisfaction levels; contact frequency)
6. the quality of student support systems (range of information available; student satisfaction; resources allocated).

Framing the Future has developed a range of critical success factors to measure the effectiveness of its business processes. Interestingly, all of these critical success factors involve e-commerce:

- number of publications issued
- wait time for response to queries
- ease of access to staff
- the satisfaction level of Framing the Future's clients, in being able to contact staff.

SELECTION OF FAIRFAX ONLINE AND THE ABC

To undertake the benchmarking, the above analysis of core competencies, key business processes and critical success factors was necessary. The analysis provided a very clear understanding of Framing the Future's business operation.

The next step was to select two organisations for the benchmarking. Fairfax Online and the Australian Broadcasting Commission (ABC Online) were selected for analysis by the Framing the Future project management team leaders and the consultant, for the reasons set out below.

Fairfax Online (see <www.fairfax.com.au>) provides Framing the Future with a comparison from the corporate sector. Fairfax Online is a business unit of John Fairfax Holdings that is currently being developed as a separate company to the parent company. It will be called F2, in the future. Fairfax Online provides Framing the Future with a valuable comparison from the corporate sector. Fairfax Online represents the development of a new e-commerce business that will take advantage of its existing digital information, such as its classified advertisements, auction details, share market information and newspaper articles. This digital information now can be accessed electronically by consumers, via the Internet. Fairfax Online boasts a formidable range of websites, ranging from The Sydney Morning Herald <www.smh.com.au> and the Australian Financial Review <www.afr.com.au> to ITJobs <www.itjobs.fairfax.com.au> and Shares <www.shares.com.au>.

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ABC Online <www.abc.net.au/default.htm> provides Framing the Future with a comparison from the publicly funded sector. ABC Online is a product of the Australian Broadcasting Commission. ABC Online is an impressive website that clearly demonstrates the ABC's success in repackaging digitally stored knowledge and information in attractive formats, for multiple audiences. ABC Online contains a vast array of material, organised into sections such as 'Learn Online', 'Rural', 'Local ABC' to 'The Lab' and 'Shop'. As at mid September 1999, there were exactly one hundred sites within ABC Online, ranging from information about its radio and television programs to news about sport, education, music and science. Some of the innovative sites include 'Message Stick', containing indigenous content, and 'The Space', containing information on arts and culture.

To undertake the benchmarking exercise, information on both companies was obtained electronically.

BENCHMARKING QUESTIONS

Having collected the data, a set of questions was asked in relation to both Fairfax Online and ABC Online by Framing the Future. The questions concerned business processes, services, performance and measurement. In the case of Fairfax Online, the business process that was compared with Framing the Future was 'distribution'. In the case of ABC Online, the business process used to compare with Framing the Future was 'marketing'.

Identification of best practice

The following features of best practice were identified at Fairfax Online:

- quality information for both specialist markets (eg business market for Australian Financial Review) and general markets (eg The Age)
- ability to rebundle information, eg articles for sale at $2 an article from the online archives <http://archive.fairfax.com.au>.

The following best practice features were identified at ABC Online:

- clear understanding of its many markets
- effective marketing slogan ('Your ABC')
- recognisable motif
- up to date information on the website.

Analysis of performance gaps

The benchmarking activity showed that Fairfax Online is able to provide high quality information due to its digital information databases, specialist publications and innovative partnerships with companies such as the US company Classified Ventures Inc, to form the joint venture Sold.com.au Pty Ltd, providing online auction sites.

ABC Online achieves a very high level of performance due to its mandate as the national broadcaster, its innovative diversification into selling products through the ABC shops, its ability to use its multiple outlets to cross promote and its ability to service different market segments with different channels (eg youth market through 'Triple J; rural market through 'Country Hour').

Developing new goals for adapting best practices to Framing the Future

As a result of this benchmarking exercise with two of the leading e-commerce organisations in Australia, Framing the Future will now:

- actively review the project website, despite its continuing success, to adapt some of the techniques modelled on the websites of Fairfax Online and ABC Online
- pursue more market research information and review its marketing strategies
- identify additional opportunities to rebundle existing information, for more markets such as ACE and Schools
- use lessons learnt from Fairfax and the ABC to freshen the public image of Framing the Future
- develop a range of 'hooks' to capture new markets
- explore the issues involved with charging for some services and products, for reinvesting the income into additional services.

Chapter 6
Findings from stakeholder interviews

Interviews were conducted with a range of key stakeholders listed in an Appendix, to cross check other findings about the extent to which Framing the Future uses e-commerce. The interviewees were selected as a sample of stakeholders with close involvement with Framing the Future, but from different perspectives. Four of the interviewees are on the Reference Group, three are State or Territory representatives, one represents an ITAB, two are with ANTA, one is a Director of a TAFE Institute and one is the Facilitator for the Certificate IV, Frontline Training (Action Learning).

QUESTIONS AND RESPONSES

1. *The efficiency of the Framing the Future national project management team has been complemented by evaluator Laurie Field. What evidence do you see of efficiency?*

Interviewees noted the following aspects of efficiency:

- Framing the Future is an appropriate 'national mechanism' for responding to a national need to know about Training Packages. People can find out about the Training Packages from an 'authoritative' source.

- The efficiency of the project is demonstrated by the scores of projects funded each year. The matching of ANTA funds by the participating organisations is a very efficient use of public money, as it ensures the participating organisations have 'invested in the training'.

- The national project team is a small and nimble group, but the number of issues it addresses and its network of contacts is very large. The team has efficient systems in place to make and to maintain contact with a large number of people. For instance, 'all possible information is provided on the website, reducing the need for one to one contact'. This frees up the national project team to travel periodically to major centres, where the team specialises in addressing large groups.
- Framing the Future's processes 'create a synergy between the publications, the public workshops and the website'. The 'use of electronic communication by the national project management team is essential, given the national reach required'.

2. *In what ways has the national project management team added value to the Framing the Future project?*

- Framing the Future has provided 'an emergent and powerful model for national project management... Framing the Future is a beacon... The model is highly decentralised and can support diversity'.
- Framing the Future has taken the appropriate lessons from 'the management of CBT in Action and the META program' and developed a new management model to suit the late 1990s and the availability of the Internet. This new model is the result of 'previous experience, intuition, testing, modifications and hands on application'.
- The national project team 'provides a model of how to manage change'; for 'how to accommodate change'. The team's role is 'catalytic and strategic'. Framing the Future 'was at first about awareness raising for the National Training Framework. It is now about cultural change, organisational change, pedagogical thinking, a new world order for VET. The management of cultural change has come to the fore'.
- 'Staff development should be driven by demand not supply'. Framing the Future is 'demand driven not supply driven'.
- The staff of Framing the Future understand that the project is about 'talking to mature adults facing crises', so they have developed processes for quickly disseminating information and providing rapid support, to suit this audience.
- 'Staff development is focused on obtaining organisational benefits. Professional development involves the individual looking at one's own career. We need both in VET'. 'The Framing the Future model may enable us to bridge the barrier between professional development and staff development'.
- The national project team's extensive use of its website and its systems for maintaining contact with large numbers of people have enabled the team 'to provide a model for others about how to manage national projects efficiently'.

- Using web technology, the project team has created a 'virtual organisation and has educated users about how virtual organisations can operate'.
- Framing the Future is 'self effacing and shores up the confidence of its customers'. It provides a 'seamless link' for customers to critical information.
- Framing the Future 'has not created a high dependency model; it has created a high service model'.
- Framing the Future 'has refined the notion of networking, by bringing in expertise when it is needed in specific areas'.
- The staff of Framing the Future are 'diverse but cohesive and very individual'.

3. *What contributions to the effectiveness of the project has been made by the Framing the Future website?*

- The website has 'brought a lot of people into the Internet age'.
- The concept that the Framing the Future website is a 'one stop shop' has been 'widely accepted by participants in Framing the Future projects'. 'Online ordering of texts has worked extremely well'.
- The website is 'simple and easy to navigate', has deliberately eschewed gimmicks and 'graphics that take time to load' and has a reputation for the 'quality, relevance and recency of the content'.
- The website has 'accumulated a whole lot of features that attract different audiences' and 'focuses the attention of project teams by providing clear directions'. It has provided 'good feedback loops' for effective and timely communication.
- The website 'pushes people to new information; sparks people off; gets people to talk; it is brutally functional; ... is very quick to get information on to the site'.

4. In what ways do you think the national project team has developed and tailored efficient customer support systems?

- Customer support is 'the core of what Framing the Future does'. The 'project tracking is very good and Framing the Future has good data management systems'. The team has continually 'modified its customer support systems' and has effectively set up 'functional responsibilities within the office in Adelaide'.
- The 'forums and chat sites are examples of services that are customised' for separate groups. The initial experiments with forums and chat did not work so well, and strategies to overcome the problems have been put in place.
- The Framing the Future operation is widely regarded for the speed with which it responds to requests. The clever use of telephone technology such as 'call forward' and message banks means that 'messages get directly to the person required and are answered promptly'.
- Framing the Future understands that 'their customers are knowledge workers and the customers want intellectual capital'. One role of Framing the Future is to 'fish out the knowledge wanted'.
- Framing the Future's effectiveness is based on the ability to 'connect with large numbers of people, to establish trust with customers, to listen and to respond quickly'.
- Framing the Future 'knows its audience is staff predominantly 35-50 years of age and these people want immediate access to information about Training Packages'.

5. To what extent do you think the national project team has used the power of electronics and digital data to develop new approaches to the bundling and unbundling of information products and the offering of multiple versions of products?

- Framing the Future is an 'excellent example of repackaging other, existing publications'. It has tailored existing publications to its own audiences. 'Framing the Future produces publications to suit specific market needs as they arise'. In some cases, the information is not new, but it is relevant to the audience.
- The use of both booklets and abbreviated versions of the booklets in four page pamphlets means that Framing the Future is catering for those who want the full analysis or a summary.
- Framing the Future has created the expectation in their customers that the latter 'can regularly download relevant and up to date products from the website'.

6. *To what extent do you think the national project team has used the power of electronics and digital data to customise existing data, to provide individualised services as well as catering for mass markets?*

- One of Framing the Future's main achievements as a national project has been 'to have a direct relationship with individual providers'.
- In establishing a 'shop' appearance on the website, Framing the Future has been able to attract a range of audiences shopping for different services.
- The speed with which Framing the Future produces new publications is valued by the customers. The national project team understands that 'last year's answers are old hat today'.
- The graphics and motifs used by Framing the Future are 'simple, striking and well known', facilitating strong brand recognition for Framing of Future ('they have flooded the market with their imagery').
- Framing the Future has effectively 'reached beyond employers and their projects to the individual users'.
- The database of Framing the Future is 'incredible'.

7. *To what extent do you think the national project team has used the power of electronics and digital data in collaboration with complementary businesses, to provide customers with an enhanced service?*

- Framing the Future has 'good relationships with a variety of other organisations'. Framing the Future 'relates well to ANTA, the States and Territories, industry and RTOs'.
- The networks created by Framing the Future 'create ongoing quality circles in the VET system and encourage excellence in the industry'.
- The 'website provides links to other relevant bodies'. The 'national project team regularly uses ANTA Fast Facts to promote its services'.

8. Any other comments?

Framing the Future 'has value as a business model' and 'is achieving more' than its charter requires of it. Organising the conference Spotlight on the Provider (1999) is an example of using the capabilities of Framing the Future. Now Framing the Future 'could look to turn some of its services in to business opportunities. For example, its materials are first class and could be sold overseas, via the Net'. A 'business plan could be prepared', identifying opportunities for revenue. Framing the Future 'needs to consolidate the business model it has developed to date and move forward'. Framing the Future needs to 'broaden from support for implementing the Training Packages to develop new strategic partners' for the provision of new services.

A challenge for Framing the Future is to further clarify 'how it can provide best practice in staff development and professional development'. There is 'a movement to accredit online training for staff' and Framing the Future is extending 'its current model to the provision of accredited courses and online learner services'.

Framing the Future will change to suit new contexts: the 'needs regarding Training Packages will change in future, with possible modifications to the Packages and the development of new directions'. More 'work will be needed with Schools and Higher Education'. Framing the Future needs to be 'continually reviewed, to ensure that it is meeting the national need and the needs of its customers'.

ADDITIONAL MATTERS

The above interviews raised many other matters that can't be reported in this publication, as they are outside of the scope of this report. In particular, this report does not attempt to describe the journey that was taken by Framing the Future in 1997-98 to arrive at all of the business processes used by Framing the Future in late 1999. Much of that journey was described in the evaluations by Field (1998,99) and Falk (1999a, 1999b).

SUMMARY

Based on the definition of e-commerce provided in an earlier chapter, the above record of interviews demonstrates conclusively that Framing the Future uses a range of new e-commerce processes to complement its conventional processes.

Chapter 7
Possible future steps

This analysis of the business management processes of Framing the Future showed that it uses e-commerce strategies to enhance processes such as the marketing of its services and products. The e-commerce strategies include using the website to provide information, to provide customer services and to market to a variety of groups and individuals. This use of e-commerce adds to the effectiveness of Framing the Future as a national staff development program.

On the one hand Framing the Future is a model to other bodies within VET as to how the power of digital data and electronic communication can be used to improve performance. Interviews with key contacts and an analysis of the internal operation of Framing the Future highlighted its e-commerce strategies.

On the other hand, a benchmarking exercise demonstrated that Framing the Future can learn from Australia's leading e-commerce businesses such as Fairfax Online and ABC Online. While both of these businesses are well funded, they have also modelled best practice in their use of existing digital data to provide new services for increased markets. Framing the Future will benefit from continuing to compare its own performance with that of business leaders.

E-STRATEGIES

Framing the Future now has a basis for planning for the delivery of enhanced staff development services, by using its digital data and electronic communication in new and different ways. Areas where it can profitably focus attention are:

1. gaining more information from its extensive database, in terms of customers' profiles, preferences and needs
2. developing a vision statement for e-commerce
3. reviewing staff roles and resource allocation in terms of the e-vision
4. identifying more markets that can be reached, using e-commerce, and developing a plan for each market
5. developing new performance measures based on an increased use of e-commerce
6. reviewing performance, using leading e-commerce organisations as comparisons
7. developing new strategic alliances, based on the use of e-commerce.

INFLUENCING VET

Another strategy to assist Framing the Future to increase its impact on staff development is to disseminate the findings from this report among Framing the Future stakeholders. The findings could become the basis of ongoing dialogue between the Framing the Future national project team with its customers for staff development. The dialogue could focus on the value of using e-commerce in VET, for improving customer service, for developing and delivering new services and for reaching new markets.

Dialogue about the use of e-commerce strategies for staff development in VET could also be conducted with peak bodies such as the EdNA VET Advisory Group (EVAG), industry groups and ANTA. In particular, the implications of this study could be discussed with EVAG in relation to the 'National Collaborative Framework for Flexible Learning in VET 2000-2004: Strategy 2000'.

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